Am ehesten könnte man sich eine abschreckende Wirkung auf Vögel vorstellen, für die der relativ große Falter als Beute attraktiv sein könnte. Immerhin müßte man voraussetzen, daß Vögel Schmetterlingen gezielt nachstellen (bzw. nachgestellt haben) um einen entsprechenden Selektionsdruck ausüben. Freilandbeobachtungen dürften jedoch selten sein und sind mir nicht bekannt.

Es wäre von Interesse, wenn derartige Beobachtungen bekannt würden, da sich dadurch die hypothetisch geforderte Wirksamkeit einer Abwehr von Vögeln (oder deren Unwirksamkeit) durch das Verhalten des Apollofalters nachprüfen ließe.

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NEW LEPIDOPTERA FROM TURKEY - I

by

AHMET ÖMER KOCAK

Zusammenfassung: In diesem 1. Beitrag über neue Lepidoptera aus der Türkei wird eine neue Unterart von Zerynthia cerisyi abanti n. subsp. beschrieben. Ferner wird über einige Arten und Unterarten berichtet, die neu für die Fauna der Türkei sind.

Abstract: In this paper, a new subspecies, Zerynthia cerisyi abanti (n. subsp. ist described. Several species and subspecies of Lepidoptera. which are new for Turkish fauna, are also mentioned.

PAPILIONIDAE

Zerynthia cerisyi abanti n. subsp. (Figs. 1-4)

Holotype of: Upperside of wings: Ground colour light yellowish; general appearance of forewing similar to ssp.caucasica LED., but two black costal markings at both sides of large black discoidal one, in most specimens, greatly reduced than others, or rarely absent; black discoidal marking large, generally anastomosed with black postdiscal spot in space 3. On hindwing with better defined black discoidal markings; orange submarginal spots reduced; bluish scales more or less developed at outer part of hindwing; tails much reduced. Underside of wings: Ground colour creamy-yellowish; other markings similar to upperside but submarginal markings paler at forewing.

Allotype Q Upperside of wings: Ground colour yellowish, generally darker in tone than male; on forewing, black markings similar but better defined

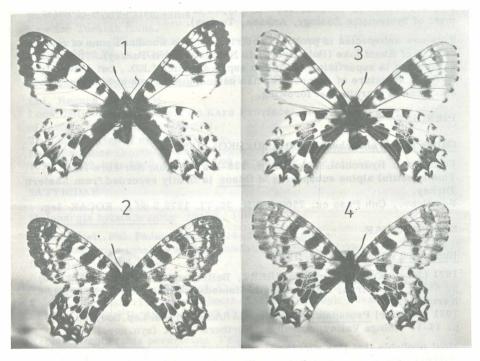


Fig. 1 - Zerynthia cerisyi abanti n. subsp. (3) Holotype (upperside)

Fig. 2 - Zerynthia cerisyi abanti n. subsp. (4) Allotype (upperside)

Fig. 3 - Zerynthia cerisyi abanti n. subsp. (3) Holotype (underside)

Fig. 4 - Zerynthia cerisyi abanti n. subsp. (?) Allotype (underside)

than those of male; on hindwing, orange submarginal spots and bluish scales better developed than male. - Underside of wings: Ground colour paler than upperside; submarginal band paler on forewing, other characters similar to upperside.

Measurements of wings:

of: forewing 21-29 mm (average 25,3 mm) expanse 39-53 mm (average 46,7 mm)

99: forewing 26-29 mm (average 27,5 mm) expanse 46-50 mm (average 48,5 mm)

Holotype of: Bolu Province, Abant lake ca. 1400 m NN, 28.V.1972; Allotype P Bolu Province, Abant lake ca. 1400 m NN, 25.V.1968; Paratypes from the same locality 14 of, 28.V.1972, 2 of, 25.V.1968; 5 of, 12, 27.V.1974 A. KOÇAK leg. (All types are deposited in the Department of Systematic Zoology, Ankara, Turkey).

This new subspecies is probably restricted at the woodland zone of middle heights of Abant lake (Bolu Prov., in North-Western Turkey). This new subspecies is superficially allied to ssp. <u>caucasica</u> LED., but differs from it by the structure of reduced reddish submarginal spots at hindwing, and black costal markings at forewing.

PIERIDAE

Colias thisoa shakuhensis SHELJUZHKO, 1935

Folia Zool. Hydrobiol. (Riga) 8, p. 138-139 "Shakuh; Northern Iran". This beautiful alpine subspecies of thisoa is firstly recorded from Eastern Turkey.

Van Prov., Çuh Pass ca. 2500 m NN, 30. VI. 1972 3 dd A. KOÇAK leg.

NYMPHALIDAE

Euapatura mirza EBERT, 1971

1971 (July). <u>Euapatura mirza</u> EBERT, Beitr.naturk. Forsch. SWDtl. 30, p. 65-69 "Nord Iran, Avaj nordöstl. Hamedan; West Iran, Rijab westl. Kermanshah".

1971 (October) <u>Protapatura iwasei</u> IGARASHI, Trahs. Lep. Soc. Jap. 22, p. 14-17 "Singa Valley, Amadiya, Northern Iraq". (syn. nov.)

Most probably that this species is restricted in the mountainous area of Hakkari (South-Eastern Turkey), Northern Iraq (IGARASHI) and North-Western Iran (EBERT). In Hakkari Province, it occurs in deep and hot valleys especially in Zap Valley between Hakkari and the cross-road of Çukurca and Uludere.

Hakkari Province (South-Eastern Turkey), Zap Valley ca. 1100 m NN, 31. VII. 1973 1 ¢; Üzümcü ca. 1300 m NN, 31. VII. 1973 1 ¢; ca. 20 km eastwards of Uludere, ca. 1300 m NN, 31. VII. 1973 1¢; ca. 40-60 km westwards of Hakkari ca. 1300 m NN, 15. VII. 1974 7 ¢¢ A. KOÇAK leg.

Melitaea gina HIGGINS, 1941

Trans. R. Ent. Soc. London 91, p. 353-354 "Southern Persia...". This species occurs at the mountains of Hakkari Province, and probably common between late June and early August.

This species is also new for Turkey.

Hakkari Province (South-Eastern Turkey): ca. 20 km southwards of Yüsekova ca. 1600 m NN, 3.VII. 1972 1 of; Suvari Halil Pass ca. 2100 m NN, 31.VII. 1973 1 of; Uludere ca. 1800 m NN, 31.VII. 1973 1 A. KOÇAK leg.

Mellicta aurelia albimacula (WOJTUSIAK & NIESIOLOWSKI, 1946)

Polsk. Akad. Prac. Musc. 6, p. 55, Pl. I, f. 14 "Central Caucasus".

This subspecies is local but common on grassy and flowery slopes of North-Eastern Anatolian Mountains.

New for Turkish fauna.

Rize Province (North-Eastern Turkey): Sivrikaya ca. 1700 m NN, 1. VIII. 1972 6 dd, 2 44 A.KOÇAK leg.

Mellicta athalia caucasogenita VERITY, 1930

Ent. Record 42, p. 134.

Local but common at Posof (in Kars Province), and flies on grassy slopes of middle heights in July-August.

This subspecies is new for Turkey.

Kars Province (North-Eastern Turkey): Posof ca. 1400-1500 m NN, 4.VIII. 1972 and 22.VII. 1973 18 33, 11 22 A.KOÇAK leg.

SATYRIDAE

Melanargia hylata iranica SEITZ, 1908

Großschmett.Pal.Faunengeb. I, 116 (39b) "Schiras"

This subspecies inhabits at the mountainous area of Hakkari Province, and flies in July and August.

New for Turkey.

Van Province (Eastern Turkey): Çuh Pass ca. 2300 m NN, 29.VII. 1973 2 & 7 QQ. Hakkari Province (South-Eastern Turkey): Yüksekova ca. 1800 m NN, 29.-31.VII. 1973 4 & 2 QQ A. KOÇAK leg.

Neohipparchia fatua persiscana VERITY, 1937

Ent. Record 49, p. 99-101

This subspecies inhabits at the eastern part of Hakkari, in South-Eastern Turkey. Another subspecies of <u>fatua</u>, <u>sichaea</u> LED. occurs at lower slopes and valleys of southern parts of this province.

New for Turkish fauna.

Hakkari Province: Yüksekova ca. 1800 m NN, 31.VII. 1973 2 od A. KOÇAK leg.

Kirinia climene alticola (LECERF, 1913)

Ann.Hist.Nat.Paris 2, p. 41 Pl. I, f. 3 "Poucht-e-Kouh, Hassemabad, Iran ".

This subspecies is most likely confined in Hakkari Province (S.E. Turkey), while another subspecies of <u>climene</u>, ssp. thatshukovi SHELJ. inhabits at southern part of Van Lake.

This subspecies is new for Turkey.

Hakkari Province: Bağişli ca. 1700 m NN, 30.VI. 1972 6 őő; Zap Valley ca. 1400 m NN, 1.VIII. 1973 1 \(\frac{1}{2} \); Yüksekova ca. 1800 m NN, 31.VII. 1973 1 \(\frac{1}{2} \); Semdinli ca. 1600 m NN, 30.VII. 1973 1 \(\frac{1}{2} \); ca. 20 km eastwards

of Uludere ca. 1900 m NN, 15. VII. 1974 1 d A. KOÇAK leg.

LYCAENIDAE

Strymon (Nordmannia) caudatula prinoptas (ZERNY, 1932)

Deut. Ent. Zeitschr. Iris 46, p. 176-177 "Becharré, Lebanon"

A single male of this subspecies firstly recorded from southern area of Antakya Province (in Southern Turkey).

Antakya Province: Harbiye ca. 400 m NN, 10.VI. 1972 1 σ A. KOÇAK, leg.

Plebejus (Kretania) eurypilus euaemon (HEMMING, 1931)

Ann. Mag. Nat. Hist. 10 (8), p. 531 "Lebanon, Aleppo".

This subspecies inhabits at semi-desert foot hills at Urfa and Gaziantep Provinces in South-Eastern Turkey.

New for Turkish fauna.

Urfa Province: 16. V. 1972 11 dd; Gaziantep Province: 17. V. 1972 9 dd, 1 º; Tahtaköprü 17. V. 1972 1 d, 1 º A. KOÇAK leg.

HESPERIIDAE

Gegenes pumilio (HOFFMANNSEGG, 1804)

This mediterranean species is also new for Turkish fauna, generally flies with G. nostrodamus F. in littoral zone.

Adana Province (Southern Turkey): Karatas 16.IX.1968 1 of; Antakya Province: Harbiye ca. 400 m NN, 19.V.1972 1 of A. KOÇAK leg.

ZYGAENIDAE

Zygaena armena EVERSMANN, 1851

This species inhabits at the mountains of Posof (in Kars Province). It flies on grassy slopes in July-August, uncommon.

It is new for Turkey.

Kars Province: Posof ca. 1450 m NN, 4. VIII. 1972 3 & A. KOÇAK leg.

NOCTUIDAE

Metopoplus boursini BRANDT, 1938

Ent. Rundsch. 55, p. 552, f. 118-122

This species inhabits at the mountainous area of Southwestern Iran, and also entering to Hakkari Province (Southeastern Turkey).

New for Turkish fauna.

Hakkari Province: Yüksekova ca. 1800 m NN, 29.VII. 1973 3 dd, Zap Valley ca. 1400 m NN, 16.VII.1974 1 \, A. KOÇAK leg.

HEPIALIDAE

Phassus schamyli (CHRISTOPH, 1888)

Horae Soc. Ent. Ross. 22, p. 309 "Borshom, Transcaucasia".

Inhabits in humid forest in Northeastern Turkey. It flies in July-August, not uncommon.

This species is new for Turkey.

Trabzon Province (Northeastern Turkey): Meryemana ca. 1100 m NN, 29.VII. 1972 2 55 A. KOÇAK leg.

PYRALIDAE

Paratalanta cultralis (STAUDINGER, 1867)

Stett. Ent. Zeit. 28, p. 108-109 "Caucasus"

This species flies in July-August, and inhabits as preceding.

New for Turkey.

Trabzon (Northeastern Turkey): Meryemana ca. 1100 m NN, 29.VII.1972 3 88 A. KOÇAK leg.

Phlyctaenodes sinuosalis LE CERF, 1913

Ann. Hist. Nat. Paris 2, p. 84-85, Pl. I, f. 11 "Ab-e-fid (Iran)"

This species is common in late June and July, inhabits at the mountains in Hakkari Province.

This species is new for Turkey.

Hakkari Province (South-Eastern Turkey): Zap Valley ca. 1400 m NN, 30. VI. 1972-2. VII. 1972 9 of; Uludere ca. 1100 m NN, 15. VII. 1974 3 of A. KOÇAK leg.

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